

IN THE CLAIMS

1-85. (Cancelled)

85. (Withdrawn) A method of treating cells for use in cell transplantation, comprising:
administering to the cells a lentivirus encoding a connexin, whereby the connexin is expressed in the cells.

86. (Currently amended) ~~The method of claim 85 A method of treating cells for use in cell transplantation to improve their electrical conductivity, comprising:
administering to the cells a lentivirus encoding a connexin, whereby the connexin is expressed in the cells and improves the electrical conductivity of the cells,~~ wherein the cells are selected from the group consisting of fibroblasts, mesenchymal stem cells, and cardiac stem cells.

87. (Withdrawn; Currently amended) The method of claim ~~85~~ 86 wherein the connexin is connexin 43.

88. (Withdrawn; Currently amended) The method of claim ~~85~~ 86 wherein the connexin is connexin 40.

89. (Withdrawn; Currently amended) The method of claim ~~85~~ 86 further comprising the step of transplanting the treated cells into a recipient host mammal.

90. (Withdrawn; Currently amended) The method of claim ~~85~~ 86 further comprising the step of transplanting the treated cells into a recipient host mammal's heart.

91. (Withdrawn; Currently amended) The method of claim ~~85~~ 86 further comprising the step of transplanting the treated cells into a recipient host mammal's brain.

92. (Withdrawn; Currently amended) The method of claim ~~85~~ 86 further comprising the step of transplanting the treated cells into a recipient host mammal's muscle.

93. (Withdrawn; Currently amended) The method of claim ~~85~~ 86 further comprising the step of transplanting the treated cells into a recipient host mammal's uterus.

94. (Currently amended) The method of claim ~~85~~ 86 wherein the cells are fibroblasts.

95. (Withdrawn; Currently amended) The method of claim ~~85~~ 86 wherein the cells are mesenchymal stem cells.

96. (Withdrawn; Currently amended) The method of claim ~~85~~ 86 wherein the cells are cardiac stem cells.

97. (Withdrawn; currently amended) The method of claim 89 wherein the ~~myoblasts cells~~ are autologous to the recipient host mammal.
98. (New) The method of claim 86 wherein the expression of connexin increases the conduction velocity of the cells.
99. (New) The method of claim 86 wherein the expression of the connexin decreases the APD80 (action potential duration at 80 % of repolarization) of the cells.